

# **VIRTUAL INCREMENTAL STORAGE APPARATUS METHOD AND SYSTEM**

## **ABSTRACT OF THE DISCLOSURE**

An apparatus for managing incremental storage includes a storage pool management module that allocates storage volumes to a virtual volume. Also included is an incremental log corresponding to the virtual volume, which maps virtual addresses to storage addresses. The apparatus may also include a replication module that sends replicated data to the virtual volume and a policy management module that determines allocation criteria for the storage pool management module. In one embodiment, the incremental log includes a lookup table that translates read and write requests to physical addresses on storage volumes within the virtual volume. The replicated data may include incremental snapshot data corresponding to one or more primary volumes. The various embodiments of the virtual incremental storage apparatus, method, and system facilitate dynamic adjustment of the storage capacity of the virtual volume to accommodate changing amounts of storage utilization.